USDA-SCS
TX-Area 20

FOTG
Section II-E

GRANITE HILLS
RANGE SITE DESCRIPTION
PE 38 - 48

Land Resource Area Central Basin

Location Burnet, Johnson City, Fredericksburg, Llano, Mason

Date 1-17-85

1. TOPOGRAPHY AND ELEVATION: This site is granite hills and slopes of 8 to 30 percent. Granite rock outcrops occur and comprise 10 to 60 percent of the landscape. Elevations are 1200 to 1900 feet.

2. SOILS:

   a. The soils are permeable, noncalcareous, shallow, gravelly, coarse sandy loam underlain by granite at depths of 11 to 20 inches. Granite outcrops occur. Available waterholding capacity is low resulting in low production. However small rains can be utilized because runoff from rocks is absorbed in the soil. Large rains generally produce runoff.

   b. Some soil taxonomic units which characterize this site are:

      Keese-Rock outcrop association, hilly
      Keese-Rock outcrop complex, 8 to 20 percent slopes

   c. Specific site location:

3. CLIMAX VEGETATION:

   a. The climax plant community is post oak and live oak savannah. The understory is dominated by tall and mid grasses such as little bluestem, sand lovegrass, sideoats grama and green sprangletop. The oak overstory shades about 20 percent of the ground. This site supports an abundance of forbs with some woody shrubs and vines. The north slopes grow a higher percent of little bluestem and oaks than south slopes.

Approved: Herb Senne, SRC, 4-11-85 Johnson Elmo 4-26-85
Listed C Brockman, TSS-Soil Scientist 4-16-85

RELATIVE PERCENTAGE

Grasses	85%	Woody	10%	Forbs	5%
Little bluestem	45	Live oak		Engelmanndaisy	
		Post oak		Trailing ratany	
Indiangrass		Blackjack oak		American snoutbean	
Purpletop	10	Hickory	10	Mexican sagewort	5
Tanglehead		Elm		Hairy ruellia	
		Hackberry		Bush sunflower	
Sideoats grama	10	Greenbriar		Sensitive briar	
		Yucca		Bundleflower	
Green sprangletop					
Arizona cottontop		Elbowbush		Bluebonnet	
Sand dropseed	10	Bumelia		Western ragweed	
Sand lovegrass		Littleflower		Crotons	T
Plains lovegrass		peach bush	T	Annual weeds	
Plains bristlegrass		Kidneywood		Annual grasses	
		White honeysuckle			
Wildrye spp.		Catclaw			
Sedges	5	Sumac			
Texas wintergrass					
Silver bluestem					
Hairy grama					
Hooded windmillgrass					
Tumble windmillgrass	5				
Fall witchgrass					
Wrights threeawn					
Fringeleaf paspalum					

b. As retrogression occurs, juniper, Texas persimmon, whitebrush and mesquite may form a dense canopy. Some common invaders on the site are signalgrass, basin sneezeweed, pricklypear, tasajillo, mesquite and certain annuals.

c. Approximate total annual yield of this site in excellent condition ranges from 1000 pounds in poor years to 2000 pounds air-dry vegetation in good years.

4. WILDLIFE NATIVE TO THE SITE: This site is used by deer, dove, quail, and turkey. Several of the woody plants, forbs, and grasses which grow on the site provide good cover, browse, mast, and seeds for game birds and animals.

5. GUIDE TO INITIAL STOCKING RATE:

a.

Condition Class	Climax Vegetation	Ac./AU/Yearlong
Excellent	76 - 100	20 - 24
Good	51 - 75	22 - 28
Fair	26 - 50	25 - 35
Poor	0 - 25	35 +

RELATIVE FORAGE QUALITY OF SPECIES

a. Cattle

Primary	Secondary	Low Value
Little bluestem	Purpletop	Wrights threeawn
Indiangrass	Sand dropseed	Red lovegrass
Tanglehead	Plains lovegrass	Annuals
Sideoats grama	Plains bristlegrass	Snake cotton
Wildrye	Texas wintergrass	Oak
Green sprangletop	Sedges	Whitebrush
Sand lovegrass	Silver bluestem	Mesquite
Climax forbs	Hairy grama	Texas grama
	Hooded windmillgrass	Catclaw
	Tumble windmillgrass	Prickly pear
	Paspalum spp.	Tasajillo
		Texas persimmon
		Juniper

b. Sheep

Primary	Secondary	Low Value
Little bluestem	Silver bluestem	Threeawns
Sideoats grama	Hairy grama	Red lovegrass
Indiangrass	Fall witchgrass	Texas grama
Green sprangletop	Oak	Whitebrush
Climax forbs	Sumacs	Mesquite
Wildrye	Hackberry	Catclaw
Sand lovegrass	Green briar	Prickly pear
Annual weeds	Sand dropseed	Tasajillo
Annual grasses	Arizona cottontop	Texas persimmon
	Windmillgrass	Juniper
	Sedges	

c. Goats

Primary	Secondary	Low Value
Oaks	Indiangrass	Red lovegrass
Hackberry	Little bluestem	Threeawn
Elms	Sideoats grama	Texas grama
Kidneywood	Midgrasses	Red grama
White honeysuckle	Annual forbs	Mesquite
Sagewort	Annual grasses	Whitebrush
Ruellia		Prickly pear
Snoutbean		Tasajillo
Greenbriar		Texas persimmon
Climax forbs		Juniper

d. Deer

Primary	Secondary	Low Value
Bundleflowers	Texas wintergrass	Perennial grasses
Sensitivebriar	Sedges	Mesquite
White honeysuckle	Wildrye	Catclaw
Littleflower peachbush	Low paspalums	Texas persimmon
Kidneywood	Fall witchgrass	Juniper
Greenbriar	Oak browse	Prickly pear
Bushsunflower	Annual grasses	Tasajillo
Hackberry	Oak mast	
Elm	Elbow wood	
Climax forbs	Sumac	
Annual forbs	Hickory	
	Bumelia	

e. Dove and quail

Primary	Secondary	Low Value
Bundleflower	Oak mast	Perennial grasses
Crotons	Other grass seed	
Sensitivebriar	Other woody plant mast	
Panicums and paspalums seed		
Wildrye (seed)		
Western ragweed		
Annual grass and weed seed		

f. Turkey

Primary	Secondary	Low Value
Tender grasses & forbs	Coarse grasses	Woody plant foliage
Woody plant seed		
Grass seed		
Forb seed		
Oak mast		

Legend and Definitions for Range Site Descriptions

1/ This rating system provides general guidance as to animal preference for plant species. It also indicates possible competition between kinds of animals for the various plants. Grazing preference changes from time to time and place to place depending upon the animals, upon plant palatability and nutritive value, stage of growth and season of use, relative abundance, and associated plants. Grazing preference does not necessarily reflect a plant's ecological place in the climax plant community.

The following definitions apply to cattle, sheep, goats, deer and antelope grazing.

Primary: These species generally decrease when the climax plant community is subjected to continuous heavy grazing pressure by the animals listed.

Secondary: These plants usually increase initially, then decrease when the site is subjected to continuous heavy grazing use by the animals listed.

Low Value: These plants continue to increase or invade with heavy continuous grazing use of the site.

For squirrel, peccary and birds the terms primary, secondary, and low value indicate species preference only. They do not indicate plant response to feeding pressure, nor do they have any ecological significance.